

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Patent Application No. 09/763,194

REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Upon entry of this Amendment, claims 1-13 are pending in the application with claim 10 being allowed and claims 1-5 and 11-13 being withdrawn from consideration as being directed to a non-elected invention. In response to the Office Action (Paper No. 9), Applicant respectfully submits that the pending claims define patentable subject matter.

I. Preliminary Matters

The Examiner acknowledged the claim for foreign priority under 35 U.S.C. § 119 and receipt of the priority documents from the International Bureau, rather than acknowledging the claim for domestic priority under 35 U.S.C. § 120. That is, the present application is a continuation application under 37 C.F.R. § 1.53(b) claiming priority benefit under 35 U.S.C. § 120 of PCT application PCT/JP99/02379 (rather than a National stage application under 35 U.S.C. § 371), as indicated on the transmittal letter filed February 20, 2001. Accordingly, Applicant requests that the Examiner acknowledge the claim for domestic priority under 35 U.S.C. § 120 in the next action.

II. Rejection of claims 6 and 9 under 35 U.S.C. § 112, second paragraph

Claims 6 and 9 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite because the Examiner asserts that claims 6 and 9 contain grammatical and/or idiomatic errors. By this Amendment, Applicant has amended the claims to improve clarity. Accordingly, the Examiner is requested to remove the § 112, second paragraph, rejection of record.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Patent Application No. 09/763,194

III. Rejection of claims 6-9 under 35 U.S.C. § 103(a)

Claims 6-9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Inoue (USP 3,741,426) in view of Moro et al. (USP 6,348,668; hereafter “Moro”) and JP 2-24025 (submitted with the IDS filed February 20, 2001). The Moro patent is assigned to Mitsubishi Denki Kabushiki Kaisha and is prior art under 35 U.S.C. § 102(e) since the Moro patent issued on February 19, 2002 and the present application was filed on February 20, 2001 as a continuation application under 37 C.F.R. § 1.53(b) of PCT application PCT/JP99/02379 filed May 7, 1999.¹ Applicant submits that the Moro patent and the present application were, at the time the present invention was made, commonly owed by, or subject to an obligation of assignment to were, at the time the invention was made, owned by, or subject to an obligation of assignment to Mitsubishi Denki Kabushiki Kaisha. Accordingly, the Moro patent is disqualified as § 102(e) prior art applied in a 35 U.S.C. § 103 rejection.²

Nonetheless, Applicant submits that even if the cited references are combined in the manner proposed by the Examiner, the resulting discharge processing apparatus would not include all of the features of the claimed invention. That is, JP 2-24025 discloses a discharge

¹ As indicated on the face of the patent, the PCT application on which the Moro patent is based was published on November 18, 1999, and the § 102(e) date of the Moro patent is March 31, 2000.

² Pursuant to §4807 of the new American Inventors Protection Act of 1999, subject matter which was prior art under former 35 U.S.C. §103(c) via 102(e) is now disqualified as prior art against a claimed invention if that subject matter and the claimed invention “were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.” The change to §103(c) applies to any patent application filed on or after the date of enactment of November 29, 1999.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Patent Application No. 09/763,194

processing electrode having a high-tensile-strength metal core wire coated with zinc or a similar material. In contrast, the present invention is directed to a discharge surface processing electrode having a core wire made of a ductile material coated with a surface reforming material.

Although, JP 2-24025 and the present invention may appear similar in that they both teach that the electrodes are double-layered, the discharge surface reforming material according to the present invention is capable of forming a reforming layer on the surface of a workpiece. On the other hand, JP 2-24025 teaches that zinc is merely used as a material having a good discharging ability in order to improve processing speed, and does not teach or suggest using a surface reforming material to coat a ductile material, as required by independent claims 6 and 10.

Further, the two electrodes disclosed by Moro are entirely different from the two electrodes according to the present invention. Specifically, Moro merely discloses a first electrode provided for processing a surface and a second electrode for modifying the shape of the first electrode. Moro does not teach or suggest an electrode for processing a workpiece and an electrode for forming a reforming surface on the workpiece, as required by independent claim 10.

Accordingly, Applicant respectfully submits that independent claims 6 and 10, as well as dependent claims 7-9, should be allowable over the cited references.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Patent Application No. 09/763,194

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Christopher R. Lipp
Registration No. 41,157

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE



23373

PATENT TRADEMARK OFFICE

Date: December 11, 2002

Attorney Docket No.: Q63075

APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

6. (Amended) A surface discharge processing apparatus which generates an electric discharge between an electrode and a workpiece thereby forming a surface reforming layer on the surface of said workpiece, said surface discharge processing apparatus comprising:

a wire electrode as said electrode; and

a wire electrode feeder which feeds said wire electrode to said workpiece during surface discharge processing,

wherein said wire electrode is composed of a core wire made of ductile material, and a surface discharge processing material made of a surface reforming material adhered to said core wire or a raw material for the surface reforming material.

7. (Amended) The surface discharge processing apparatus according to claim 6, wherein a recess is formed in said core wire, and said surface discharge processing material is adhered to [this] the recess.

9. (Amended) The surface discharge processing apparatus according to claim 6, wherein the [processing program for performing] surface discharge processing apparatus performs the

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Patent Application No. 09/763,194

surface discharge processing [is the] under the control of a processing program which is a
processing program for wire discharge processing employed in a preparatory step of surface
discharge processing.